# **FACT SHEET**



Hastings Groundwater Contamination Site Second Street Subsite Hastings, Nebraska

June 1999

#### INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 7 has released an addendum to the Engineering Evaluation/Cost Analysis (EE/CA) for the Second Street Subsite of the Hastings Groundwater Contamination Site in Hastings, Nebraska. The original EE/CA, completed in 1995, evaluated alternative methods for a cleanup action and the costs of those methods. This addendum re-evaluates the removal action alternative and updates the EE/CA, based on new ground water data and new treatment technologies.

Although this document includes a recommendation for the site, the final decision will not be made until EPA reviews comments from the public.

## SITE BACKGROUND

The Hastings Groundwater Contamination Site in Hastings, Nebraska, consists of an aquifer contaminated with hazardous substances as well as the contaminated soil that overlies the aquifer. The EPA has divided the site into seven subsites, based on the various sources of the contamination.

The Second Street Subsite is located on the eastern edge of central downtown area of Hastings. From the late 1800s to the early 1900s, a manufactured gas plant (MGP) operated in this

## **AVAILABILITY SESSION**

EPA will hold an informal meeting:

Thursday, June 24, 1999 4:00 p.m. - 7:00 p.m. Hastings Public Library 517 West 4<sup>th</sup> Street Hastings, Nebraska

EPA representatives will be available to answer your questions one-on-one. Community members are encouraged to stop by at any time during this information session.

The addendum to the EE/CA is available for public review and comment for 45 days, running from June 14, 1999, through July 29, 1999. Comments can be submitted orally or in writing. Written comments (postmarked no later than July 29, 1999) can be sent to:

Dana Blubaugh, EPA Office of External Programs 726 Minnesota Avenue Kansas City, KS 66101\*

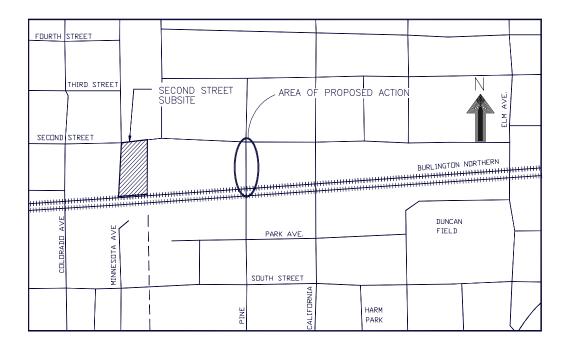
\*As of June 21, 1999, the address for EPA will be 901 N. 5<sup>th</sup> Street, Kansas City, Kansas, 66101.

area, producing gas for household heating, cooking, and lighting. As part of this process, by-products (primarily coal tar) were produced and disposed of on-site and now contaminate the soil and ground water. The main contaminants, which are generally found in coal gas wastes, are benzene, ethyl benzene, toluene, xylenes (BTEXs), and polynuclear aromatic hydrocarbons (PAHs).

In addition to the MGP source area, an adjoining area located immediately to the east of the MGP source area, the Foote Oil Company UST (Underground Storage Tank) site, has been found to contain contamination associated with underground storage tanks. The same BTEX contaminants found in the MGP wastes are also components of refined petroleum products, such as gasoline. As a result, it is impossible, given the existing data, to distinguish the MGP ground water contamination from the Foote Oil Company UST site.

Based on contaminants identified in both onsite MGP soil and ground water and downgradient ground water, an EE/CA was prepared and released in August 1995. After conducting a public comment period and an Availability Session in Hastings, the EPA signed an Action Memorandum to authorize the removal action. Although this EE/CA addressed onsite MGP soil and ground water contamination as well as downgradient ground water contamination, the Action Memorandum authorized only the onsite actions. The MGP source removal actions, initiated in January 1997, consisted of: 1) contaminant removal by soil vapor extraction for soil, and 2) extraction, treatment, and surface water discharge for ground water. The onsite source removal actions continue to operate today.

Since 1995, the EPA has collected additional ground water data from the analysis of samples collected from the downgradient monitoring wells. As a result, the downgradient ground water contaminant plume has been better defined.

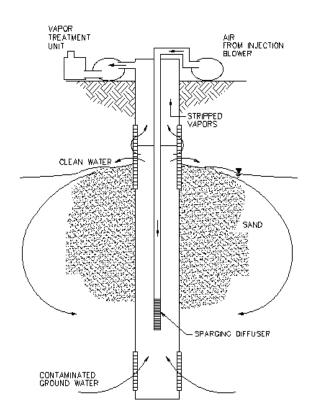


## ADDENDUM TO THE ENGINEERING EVALUATION/COST ANALYSIS

The 1995 EE/CA evaluated the downgradient (benzene) contaminant plume associated with the Second Street Subsite. The addendum to the EE/CA presents an updated evaluation of ground water removal action alternatives. This area extends several blocks to the east from the area of the current Hastings Police Department building.

The original EE/CA identified extraction, treatment and surface water discharge as a ground water removal action alternative. The addendum to the EE/CA identifies: A) in-situ ground water treatment without discharge (in-well stripping), and B) ground water extraction, treatment, and surface water discharge. EPA is proposing the in-situ ground water treatment without discharge (in-well stripping) as the preferred removal action alternative.

This newer alternative would require the installation of two in-well stripping wells. The treatment process involves the low-pressure injection of air into the well below the water table. The injected air causes a pressure that acts like an airlift pump to draw ground water up and through a lower screen. The trapped air strips the contaminants and aerates the ground water. The aerated water is allowed to rise until it reaches a level where it can flow out into the ground water formation through an upper screen. This would result in a flow pattern which would then treat a large radial area outward from the well. The contaminated vapors stripped from the water would be removed by an above-ground vacuum system and treated prior to discharge into the atmosphere. The newer in-well stripping technology does not require above-ground handling or discharge of water.



## **ADDITIONAL INFORMATION**

EPA encourages community members to review and comment on the addendum to the EE/CA for the Second Street Subsite of the Hastings Groundwater Contamination Site. The document is open for public comment from June 14, 1999, to July 29, 1999. The administrative record containing the EE/CA and other site-related documents can be reviewed during normal business hours at the Hastings Public Library, 517 West 4th Street, Hastings, Nebraska, or the EPA Region 7 office at 726 Minnesota Avenue, Kansas City, Kansas.

If you have questions about this fact sheet, or need additional information regarding this site, please contact:

Dana Blubaugh, Community Involvement Coordinator Office of External Programs U.S. EPA, Region 7 726 Minnesota Avenue Kansas City, Kansas 66101 \* (913) 551-7003 or 1-800-223-0425

Darrell Sommerhauser, Site Project Manager Superfund Division U.S. EPA, Region 7 726 Minnesota Ave. Kansas City, Kansas 66101 \* (913) 551-7711 or 1-800-223-0425

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